

Amendments to the Claims

This Listing of the Claims will replace all prior versions, and listings, of claims in the present Application.

Listing of Claims

1. (Currently amended) A method of treatment of an extracorporeal organ that is a donated transplantation organ and is outside the donor's body or isolated organ of a patient that is inside or attached to a patient's body but is isolated from the patient's blood supply, said method comprising contacting the extracorporeal organ or the isolated organ with a composition including a metal carbonyl compound or pharmaceutically acceptable salt thereof and at least one pharmaceutically acceptable carrier wherein the metal carbonyl or pharmaceutically acceptable salt thereof makes available carbon monoxide to limit ~~post-ischaemic~~ post-ischemic damage to said extracorporeal organ or said isolated organ.

2. (Canceled)

3. (Currently amended) A method according to claim 1, wherein said metal carbonyl makes CO available by at least one of the following means:

CO derived by dissociation of the metal carbonyl is present in the composition in dissolved form;
on contact with a solvent the metal carbonyl releases CO;
on contact with a tissue, organ or cell the metal carbonyl releases CO;
on irradiation, the metal carbonyl releases CO.

4. (Currently amended) A method according to claim 1, wherein treatment is of said extracorporeal organ.

5. (Currently amended) A method according to claim 1, wherein treatment is of said isolated organ.

6. (Currently amended) A method according to claim 1₂ wherein the contacting step includes perfusing said organ with said composition.

7. (Currently amended) A method according to claim 1₂ wherein the metal carbonyl is a compound of the formula $M(CO)_x A_{y_z}$ where x is at least one, y is at least one, M is a metal, ~~the~~ or each A is an atom or group bonded to M by an ionic, covalent₂ or coordination bond₂ but is not CO, and in the case where $y > 1$ ₂ each A may be the same or different, or a pharmaceutically acceptable salt of such a compound.

8. (Currently amended) A method according to claim 7₂ wherein M is a transition metal.

9. (Currently amended) A method according to claim 7, wherein A is selected from neutral or anionic ligands such as halide or derived from Lewis bases and having N, P, O, S₂ or C as the coordinating atom.

10. (Currently amended) A method according to claim 1₂ wherein the metal carbonyl compound has the formula:



M is Fe, Co₂ or Ru,

x is at least one,

y is at least one,

z is zero or at least one,

each A is a ligand other than CO and is monodentate or polydentate with respect to M and is selected from ~~the amino acids~~:

alanine,

arginine,

asparagine asparagines,

aspartic acid,

cysteine,

glutamic acid,

glutamine,
glycine,
histidine,
isoleucine,
leucine,
lysine,
methionine,
phenylalanine,
proline,
serine,
threonine,
~~tryptophan~~ Tryptophan,
~~tyrosine~~ Tyrosine,
~~valine~~ Valine,
 $[\text{O}(\text{CH}_2\text{COO})_2]^{2-}$, and
 $[\text{NH}(\text{CH}_2\text{COO})_2]^{2-}$, and

B is optional and is a ligand other than CO.

11-15. (Canceled)

16. (Currently amended) A method of treatment of an extracorporeal organ that is a donated transplantation organ and is outside the donor's body, said method comprising contacting the extracorporeal organ with a composition including a metal carbonyl compound or pharmaceutically acceptable salt thereof and at least one pharmaceutically acceptable carrier, at a temperature in the range of 2 to 10°C, wherein the metal carbonyl makes available carbon monoxide to limit post-ischemic ~~post-ischaemic~~ damage of said extracorporeal organ.

17. (Currently amended) A method according to claim 16, wherein said metal carbonyl makes CO available by at least one of the following means:

CO derived by dissociation of the metal carbonyl is present in the composition in dissolved form;

on contact with a solvent, the metal carbonyl releases CO;
 on contact with a tissue, organ, or cell, the metal carbonyl releases CO;
 on irradiation, the metal carbonyl releases CO.

18. (Currently amended) A method according to claim 16, wherein the contacting step includes perfusing said organ with said composition.

19. (Currently amended) A method according to claim 16, wherein the metal carbonyl is a compound of the formula $M(CO)_x A_y z$ where x is at least one, y is at least one, M is a metal, ~~the~~ or each A is an atom or group bonded to M by an ionic, covalent, or coordination bond, but is not CO, and in the case where $y > 1$, each A may be the same or different, or a pharmaceutically acceptable salt of such a compound.

20. (Currently amended) A method according to claim 19, wherein M is a transition metal.

21. (Previously presented) A method according to claim 19, wherein each A is separately selected from neutral or anionic ligands.

22. (Currently amended) A method of claim 21, wherein each A is separately a halide or is derived from a Lewis base and has N, P, O, S, or C as the coordinating atom.

23. (Currently amended) A method according to claim 16, wherein the metal carbonyl compound has the formula:

$M(CO)_x A_y B_z$ where

M is Fe, Co, or Ru,

x is at least one,

y is at least one,

z is zero or at least one,

each A is a ligand other than CO and is monodentate or polydentate with respect to M and is alanine, arginine, asparagine ~~asparagines~~, aspartic acid, cysteine, glutamic acid, glutamine, glycine,

histidine, isoleucine, leucine, lysine, methionine, phenylalanine, proline, serine, threonine, tryptophan, tyrosine, valine, $[\text{O}(\text{CH}_2\text{COO})_2]^{2-}$, or $[\text{NH}(\text{CH}_2\text{COO})_2]^{2-}$, and

B is optional and is a ligand other than CO.